

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

The Specification is amended as follows:

On page 9, lines 4 through 11:

Fig. 1 shows a connection system 20 which is suitable for use by the invention. The connection system 20 includes a circuit board 22 having, among other things, a section of the circuit board [material] 24 upon which reside signal launches 26-1, ..., 26-N (collectively signal launches 26). Each signal launch 26 includes multiple vias 28 (plated-through holes), and a pin 30 that inserts into a particular one of the vias 28 when moved in a direction 31 that is perpendicular to the plane of the circuit board 22. In one arrangement, the pin 30 solders to that via 28. In another arrangement, the pin 30 installs within that via 28 in a press-fit manner and is more easily removable.

The Claims are amended as follows:

Claims 19-21 were canceled without prejudice as to the subject matter contained therein.

The claims are further amended as follows:

1. (Amended) A circuit board, comprising:
 - a [section of] circuit board portion [material] having a signal layer [conductor], a ground layer [conductor], and dielectric material that physically separates the signal layer [conductor] and the ground layer [conductor]; and
 - a signal launch having:
 - a signal via that physically contacts [the] a signal conductor of the signal layer and the dielectric material of the section of circuit board material, and
 - a first set of ground vias and a second set of ground vias that physically contact [the] a ground conductor of the ground layer and the dielectric material of the section of circuit board material, wherein each of the first set of ground vias is disposed a first radial distance from the signal via, wherein each of the second set of ground vias is disposed a second radial distance from the signal via, and wherein the first and second radial distances are different.
2. (Amended) The circuit board of claim 1 wherein the signal launch further includes:
 - a ground pad, disposed on a surface of the [section of] circuit board portion [material], the ground pad physically contacting each of the first and second sets of ground vias of the signal launch and the dielectric material of the [section of] circuit board portion [material].

3. (Amended) The circuit board of claim 1 wherein the signal launch further includes:

a first ground pad, disposed on a first surface of the [section of] circuit board portion [material], the first ground pad physically contacting each of the first and second sets of ground vias of the signal launch and the dielectric material of the [section of] circuit board portion [material]; and

a second ground pad, disposed on a second surface of the [section of] circuit board portion [material] that is coplanar with the first surface of the [section of] circuit board portion [material], the second ground pad physically contacting each of the first and second sets of ground vias of the signal launch and the dielectric material of the [section of] circuit board portion [material].

7. (Amended) The circuit board of claim 1 wherein the signal launch further includes:

a signal pin that electrically connects with the signal conductor of the [section of] circuit board portion [material] through the signal via, the signal pin extending perpendicularly from a plane of the [section of] circuit board portion [material].

10. (Amended) The circuit board of claim 1 wherein the dielectric material of the [section of] circuit board portion [material] separates the first set of ground vias from the signal via by less than 0.082 of an inch.

12. (Amended) The circuit board of claim 1 wherein the [section of] circuit board portion includes (i) a connecting surface that faces a connector when the connector connects to the signal launch and (ii) a distal surface that faces away from the connector when the connector connects to the signal launch, and wherein the signal conductor of the [section of] circuit

board portion [material] connects with the signal via of the signal launch at a point along the signal via that is closer to the distal surface than the connecting surface.

13. (Amended) A connection system, comprising:
 - a circuit board that includes (i) a [section of] circuit board portion [material] having a signal layer [conductor], a ground layer [conductor], and dielectric material that physically separates the signal layer [conductor] and the ground layer [conductor], and (ii) a signal launch having:
 - a signal via that physically contacts [the] a signal conductor of the signal layer and the dielectric material of the [section of] circuit board portion [material], and
 - a first set of ground vias and a second set of ground vias that physically contact [the] a ground conductor of the ground layer and the dielectric material of the [section of] circuit board portion [material], wherein each of the first set of ground vias is disposed a first radial distance from the signal via, wherein each of the second set of ground vias is disposed a second radial distance from the signal via, and wherein the first and second radial distances are different; and
 - a coaxial connector that mounts to the signal launch of the circuit board in order to provide electrical access to the signal and ground conductors of the circuit board portion.
14. (Amended) The connection system of claim 13 wherein the signal launch of the circuit board further includes:

a ground pad, disposed on a surface of the [section of] circuit board portion [material], the ground pad physically contacting each of the first and second sets of ground vias of the signal launch and the dielectric material of the [section of] circuit board portion [material].

18. (Amended) The connection system of claim 13 wherein the signal launch further includes:

a signal pin that electrically connects with the signal conductor of the [section of circuit board material] signal layer through the signal via, the signal pin extending perpendicularly from a plane of the [section of] circuit board portion [material].

22. (Newly Added) The circuit board of claim 1 wherein the first set of ground vias includes multiple first ground vias which are substantially evenly distributed in a radial manner around the signal via, and wherein the second set of ground vias includes multiple second ground vias which are substantially evenly distributed in a radial manner around the signal via.

23. (Newly Added) The circuit board of claim 22 wherein the signal via, at least two of the first ground vias and at least two of the second ground vias are disposed co-linearly.

24. (Newly Added) The connection system of claim 13 wherein the first set of ground vias includes multiple first ground vias which are substantially evenly distributed in a radial manner around the signal via, and wherein the second set of ground vias includes multiple second ground vias which are substantially evenly distributed in a radial manner around the signal via.

25. (Newly Added) The circuit board of claim 24 wherein the signal via, at least two of the first ground vias and at least two of the second ground vias are disposed co-linearly.
26. (Newly Added) A circuit board, comprising:
 - a section of circuit board material having a signal conductor, a ground conductor, and dielectric material that physically separates the signal conductor and the ground conductor; and
 - a signal launch having:
 - a signal via that physically contacts the signal conductor and the dielectric material of the section of circuit board material, and
 - a first set of ground vias and a second set of ground vias that physically contact the ground conductor and the dielectric material of the section of circuit board material, wherein each of the first set of ground vias is disposed a first radial distance from the signal via, wherein each of the second set of ground vias is disposed a second radial distance from the signal via, and wherein the first and second radial distances are different.
27. (Newly Added) A connection system, comprising:
 - a circuit board that includes (i) a section of circuit board material having a signal conductor, a ground conductor, and dielectric material that physically separates the signal conductor and the ground conductor, and (ii) a signal launch having:
 - a signal via that physically contacts the signal conductor and the dielectric material of the section of circuit board material, and

a first set of ground vias and a second set of ground vias that physically contact the ground conductor and the dielectric material of the section of circuit board material, wherein each of the first set of ground vias is disposed a first radial distance from the signal via, wherein each of the second set of ground vias is disposed a second radial distance from the signal via, and wherein the first and second radial distances are different; and

a coaxial connector that mounts to the signal launch of the circuit board in order to provide electrical access to the signal and ground conductors of the circuit board.